

WHAT IS CLAIMED IS:

1. A medical device comprising:
an implantable structure;
5 a basecoat matrix, including a combination of rapamycin and a
cytostatic glucoside, in therapeutic dosages, incorporated in a first
polymeric material, the basecoat matrix being affixed to the surface of
the implantable medical device; and
a topcoat, including a second polymeric material, affixed to the
10 basecoat matrix for controlling the elution rate of the rapamycin and the
cytostatic glucoside.
2. The medical device according to claim 1, wherein the cytostatic
glucoside comprises etoposide.
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3. The medical device according to claim 1, wherein the cytostatic
glucoside comprises teniposide.
4. The medical device according to claim 1, wherein the cytostatic
20 glucoside comprises podofilox.
5. The medical device according to claim 1, wherein the implantable
structure comprises a stent.
- 25 6. The medical device according to claim 1, wherein the implantable
structure comprises a stent-graft.
7. The medical device according to claim 1, wherein the implantable
structure comprises an anastomosis device.
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8. The medical device according to claim 1, wherein the second
polymeric material is incompatible with the first polymeric material,

thereby creating both a physical and chemical barrier to the elution of the rapamycin and the cytostatic glucoside.

5 9. The medical device according to claim 8, wherein the first polymeric material comprises a fluoropolymer.

10 10. The medical device according to claim 9, wherein the second polymeric material comprises an acrylic.

10 11. A medical device comprising:
 an implantable structure; and
 a combination of rapamycin and a cytostatic glucoside, in therapeutic dosages, releasably affixed to the implantable structure for the treatment of restenosis following vascular injury.

15 12. The medical device according to claim 11, wherein the cytostatic glucoside comprises etoposide.

20 13 The medical device according to claim 11, wherein the cytostatic glucoside comprises teniposide.

14. The medical device according to claim 11, wherein the cytostatic glucoside comprises podofilox.

25 15. The medical device according to claim 11, wherein the implantable structure comprises a stent.

16. The medical device according to claim 11, wherein the implantable structure comprises a stent-graft.

30 17. The medical device according to claim 11, wherein the implantable structure comprises an anastomosis device

18. The medical device according to claim 11, further comprising a polymeric coating, the combination of rapamycin and cytostatic glucoside being incorporated into the polymeric coating.

5 19. A method for treating restenosis comprising the local administration of a therapeutic dose of a combination of rapamycin and a cytostatic glucoside.

10 20. A method for treating restenosis comprising the administration of a therapeutic dose of a combination of rapamycin and etoposide.

21. A medical device comprising:
an implantable medical structure; and
a combination of rapamycin and etoposide, in therapeutic
15 dosages, releasably affixed to the implantable structure for the treatment of restenosis following vascular injury.

22. A medical device comprising:
an implantable structure; and
20 a cytostatic glucoside, in therapeutic dosages, releasably affixed to the implantable structure for the treatment of restenosis following vascular injury.

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